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10/788,519	02/27/2004	James Daren Bledsoe	10031155-01	6922
57299	7590	09/04/2009	EXAMINER	
Kathy Manke Avago Technologies Limited 4380 Ziegler Road Fort Collins, CO 80525			NGUYEN, ALLEN H	
			ART UNIT	PAPER NUMBER
			2625	
			NOTIFICATION DATE	DELIVERY MODE
			09/04/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/788,519

Applicant(s)

BLEDSOE ET AL.

Examiner

Allen H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-41, 45 and 47-56 is/are pending in the application.
- 4a) Of the above claim(s) 32-40, 47-52 and 56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41, 45 and 53-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 05/13/2009.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

- This office action is responsive to the following communication:
Amendment filed on 06/22/2009.
- Claims 32-41, 45, 47-56 are currently pending in the application.

Election/Restrictions

1. Claims 32-40, 47-52, 56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 06/22/2009.

Response to Arguments

2. Applicants' arguments filed 06/22/2009 have been fully considered but they are not persuasive.
3. With respect to applicants' argument that "neither reference teaches or suggests the following portion of amended claim 41: "host computer communicatively coupled to the multifunctional peripheral device for transferring the first portion of firmware code to the peripheral device on an as-needed basis, thereby enabling the first functional mode while eliminating storage in the peripheral device, of firmware code portions that are not used when the first functional mode is selected".

In response: Parry '166 discloses a computer network (602/621, fig. 6), comprising:

a host computer comprising a memory in which is stored firmware code (A printer driver is a piece of software or firmware that receives data or a document to be printed from an application running on the computer; see col. 1, lines 40-50) corresponding to each of the plurality of functional modes that are executable on the multifunctional peripheral device (many users employ a multi-function peripheral (MFP) with a host computer. A multi-function peripheral is a device that combines some form of printer with one or more of the following: a scanner, a copier, or a facsimile machine; see col. 1, lines 25-30), the host computer communicatively coupled to the multifunctional peripheral device (i.e., a wide variety of printers and printing devices have been developed that can receive a print job from a host computer and produce a hardcopy of the document or data represented by that print job; see col. 1, lines 20-25) for transferring the first portion of firmware code to the peripheral device on an as-needed basis (i.e., uploading part or portion of firmware to printing device; see col. 6, line 67, and col. 7, lines 1-5, fig. 4), thereby enabling the first functional mode while eliminating storage in the peripheral device, of firmware code portions that are not used when the first functional mode is selected (i.e., the firmware code (103) can be selected by a printing device to accomplish a wide variety of purposes such as fixing an existing firmware bug, upgrading existing firmware, or adding new functionality to the printing device; see col. 3, lines 44-54, fig. 4).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 55 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding claim 55, the limitation of "the first portion of firmware code corresponds to the copy mode, and the as-needed basis comprises precluding the storage of firmware code portions corresponding to the scan, print, and facsimile modes in the peripheral device" is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

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(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 41, 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Parry et al. (US 7,043,166).

Regarding claim 41, Parry '166 discloses a computer network (602/621, fig. 6), comprising:

a multifunctional peripheral device (i.e., many users employ a multi-function peripheral (MFP) with a host computer; see col. 1, lines 25-35) containing a volatile memory (i.e., the firmware components (102) may be stored in non-volatile memory of the printing device (130); see col. 5, lines 10-15) having a limited memory capacity (inherently, memory capacity is selected when computer is storing any kind of data, including storing firmware data/code, e.g., if the computer need to store 10 Mb of data, it must select memory space in a memory with 10Mb capacity) that is limited to storing a first portion of firmware code (i.e., part of the firmware components (102, FIG. 1) may be uploaded to the printing device memory; see col. 6, line 67 and col. 7, lines 1-5, fig. 4) corresponding to a first functional mode amongst (i.e., the firmware code (103) can be used by a printing device to accomplish a wide variety of purposes such as fixing an existing firmware bug, upgrading existing firmware, or adding new functionality to the printing device; see col. 3, lines 44-54), a plurality of functional modes that are executable on the multifunctional peripheral device (i.e., firmware upgrades include, bug fixes, printer security fixes, customized color tables for the

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ink or toner cartridge used by a printing device, Internet capabilities, performance enhancements, providing additional functionality, etc; see col. 3, lines 15-20);

a host computer comprising a memory in which is stored firmware code (A printer driver is a piece of software or firmware that receives data or a document to be printed from an application running on the computer; see col. 1, lines 40-50) corresponding to each of the plurality of functional modes that are executable on the multifunctional peripheral device (many users employ a multi-function peripheral (MFP) with a host computer. A multi-function peripheral is a device that combines some form of printer with one or more of the following: a scanner, a copier, or a facsimile machine; see col. 1, lines 25-30), the host computer communicatively coupled to the multifunctional peripheral device (i.e., a wide variety of printers and printing devices have been developed that can receive a print job from a host computer and produce a hardcopy of the document or data represented by that print job; see col. 1, lines 20-25) for transferring the first portion of firmware code to the peripheral device on an as-needed basis (i.e., uploading part or portion of firmware to printing device; see col. 6, line 67, and col. 7, lines 1-5, fig. 4), thereby enabling the first functional mode while eliminating storage in the peripheral device, of firmware code portions that are not used when the first functional mode is selected (i.e., the firmware code (103) can be selected by a printing device to accomplish a wide variety of purposes such as fixing an existing firmware bug, upgrading existing firmware, or adding new functionality to the printing device; see col. 3, lines 44-54, fig. 4).

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Regarding claim 45, Parry '166 discloses the computer network (Network/Internet 602/621, fig. 6), further comprising a server (a web server that the purchaser accesses through the Internet 602, col. 8, lines 55-65, fig. 6) coupled to the host computer (Computer 608, fig. 6) through a communications network (Communication Unit 612, fig. 6).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parry et al. (US 7,043,166).

Regarding claim 53, Parry '166 discloses the computer network (Network/Internet 602/621, fig. 6), wherein the plurality of functional modes (i.e., the firmware code (103) can be selected by a printing device to accomplish a wide variety of purposes such as fixing an existing firmware bug, upgrading existing firmware, or adding new functionality to the printing device; see col. 3, lines 44-54, fig. 4).

It is noted that Parry does not explicitly show the plurality of functional modes consists of: I) a copy mode, II) a scan mode, III) a print mode and IV) a facsimile mode.

However, it is obvious to a person with ordinary skill in the art that the multi-function peripheral that combines some form of printer for print mode with one or more of the following: a scanner for scan mode, a copier for copy mode, or a facsimile machine for fax mode is employed in home offices stated in col. 1, lines 15-30 that such a modification would ensure the plurality of functional modes consists of: I) a copy mode, II) a scan mode, III) a print mode and IV) a facsimile mode.

Regarding claim 54, claim 54 has been analyzed and rejected w/r to claim 53 above.

Regarding claim 55, Parry '166 discloses the computer network (Network/Internet 602/621, fig. 6), wherein the first portion of firmware code corresponds to the copy mode (the firmware components (102) can be used to perform, or upgrade the performance of, any function on a printing device. Therefore, it is inherent to select the firmware components corresponding, such as a copy mode, to employ a multi-function peripheral MFP, a multi-function peripheral that combines some form of printer with one or more of the following: a scanner, a copier, or a facsimile machine; see col. 5, lines 63-67 and col. 6, lines 1-5), and the as-needed basis comprises precluding the storage of firmware code

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portions corresponding to the scan, print, and facsimile modes in the peripheral device (i.e., the firmware code (103) can be selected by a printing device to accomplish a wide variety of purposes such as fixing an existing firmware bug, upgrading existing firmware, or adding new functionality to the printing device. It is obvious when the firmware code 103 components to be selected for copy mode is only copy device is activated for corresponding mode; see col. 3, lines 44-54, fig. 4)

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hirst et al. (US 5,930,553) discloses image forming and office automation device consumable with memory.

Harada (US 2001/0040688) discloses the software emulation determiner in the host computer receives the data, detects the number of spool files queued in the printer.

Nassh et al. (US 5,566,335) discloses method and apparatus for firmware upgrades in embedded systems.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is

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filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen H. Nguyen whose telephone number is (571)270-1229. The examiner can normally be reached on 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KING Y. POON can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

/Allen H. Nguyen/
Examiner, Art Unit 2625